What is claimed is:

1. A method for installing software on a hardware device by an agent which resides on the hardware device comprising:

a communication network gateway sending a message to an agent residing on the hardware device informing the agent of a command to install software on the hardware device on which it resides;

an agent verifying the validity of the message sent to it with the communication network gateway;

the communication network gateway transmitting an indication regarding the validity of the command;

the agent receiving the command to install software on the hardware device if the indication transmitted from the gateway indicates that the command is valid;

the communication network gateway initiating a locking signal regarding using pre-determined resources of the hardware device to execute the command to install software on the hardware device;

the agent requesting files from a file server via the communication network gateway required for completion of the received installation command;

the file server sending the files required for completion of the received installation command to the agent via the communication network gateway;

the agent installing the files sent to it on the hardware device upon which it resides in response to the received installation command; and

the communication network gateway removing the locking signal associated with using the pre-determined resources of the hardware device to execute the command to install software in a hardware device after the files have been installed.

1   2. The method of claim 1, wherein the locking signal comprises a device
2   resource locking signal that prevents the gateway from sending a second command
3   relating to pre-determined resources of the hardware device in use by the agent
4   installing software.

1   3. The system of claim 1, further comprising the communication gateway
2   entering identification information of the hardware device and the pre-determined
3   resources of the hardware device required to execute the command to install
4   software on the hardware device in a table within a system database.

1   4. The method of claim 3, wherein the table within the system database
2   operates using uniqueness constraints for hardware device identification
3   information contained therein.

1   5. The method of claim 4, wherein the locking signal comprises a
2   uniqueness constraints signal.

1   6. The method of claim 4, wherein the table within the system database
2   contains uniqueness constraints regarding resource identification information
3   contained therein.

1   7. The method of claim 6, wherein the locking signal comprises a
2   uniqueness constraint signal.

1   8. The method of claim 1, further comprising:
2   the agent installing the files according to an instruction set.

1   9. The method of claim 8, wherein the instruction set comprises the
2   received installation command.

1   10. The method of claim 8, wherein the instruction set comprises a
2   command queue.

1   11. The method of claim 8, wherein the instruction set resides in a
2   network database.

1   12. The method of claim 8, wherein the instruction set resides in a
2   network file server.

1   13.   A method of controlled software commands executed on the hardware
2   device by an agent, comprising the steps of:
3   the agent receiving a software command from a control network, which is
4   part of a command queue;
5   the agent executing the software command on a hardware device;
6   determining resources on the hardware device currently in use;
7   preventing, by a locking device, a software command from the command
8   queue from being executed upon the device if a resource it requires on the device
9   for execution of the command is in use; and
10   repeating the steps of receiving, executing, and preventing by the agent
11 until all commands of the command queue have been executed.

1   14. The method of claim 13, wherein the agent resides on the hardware
2   device.
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1   15. The method of claim 13, wherein the step of determining comprises
2   determining all hardware device resources currently in use.

1   16. The method of claim 13, wherein the step of preventing comprises
2   locking a group of resources on the hardware device.

1   17. The method of claim 16, wherein the step of preventing comprises
2   locking all resources on the hardware device.

1   18. The method of claim 16, wherein the step of preventing comprises
2   preventing the execution of software commands requiring one of the group of
3   locked resources.

1   19. The method of claim 13, wherein the step of preventing comprises
2   locking a single resource on the hardware device.

1   20. The method of claim 19, wherein the step of preventing comprises
2   preventing the execution of software commands requiring the single locked
3   resource.

1   21. The method of claim 13, wherein the step of determining comprises
2   verifying the presence of a resource identification number within a system
3   database.

1   22. The method of claim 21, wherein each hardware device resource
2   contained within the table of the system database is constrained by a uniqueness
3   constraint.